

Application No. 10/064,653  
Amendment dated April 6, 2004  
Reply to Office Action of December 23, 2003

**(b) REMARKS**

Claims 1-25 remain pending in this application. Applicant notes with appreciation that Claims 14-25 have been allowed. Claims 3-6 and 11-13 have been withdrawn from consideration. Claims 1 and 7-9 have been amended as indicated above.

Claims 1 and 7 have been rejected under 35 U.S.C. 102(b) as being anticipated by US Patent 6,154,310 to Galvanauskas et al. ("Galvanauskas"). Claims 8 and 9 have been rejected under 35 U.S.C. 103(a) as being unpatentable over Galvanauskas. Claims 2 and 10 have been rejected under 35 U.S.C. 103(a) as being unpatentable over Galvanauskas in view of US Patent 5,462,879 to Bentsen ("Bentsen").

Independent Claim 1, as amended, claims an illumination device with two paths for a laser beam. On one, frequency-preserving path, the frequency of the laser beam remains unchanged; on the other, alternative, path, a frequency conversion device changes the frequency of the laser beam.

Independent Claim 8, as amended, claims an illumination device with multiple parallel pairs of paths for a laser beam. In each such pair of paths, on one, frequency-preserving path, the frequency of the laser beam remains unchanged; on the other, alternative, path, a frequency conversion device changes the frequency of the laser beam.

Galvanauskas describes a device with a plurality of wavelength-conversion channels 12 for a laser signal from an ultrashort pulse laser 10, see Fig. 7. Each channel 12 changes the frequency of the incoming laser beam. Fig. 12 shows three wavelength-conversion channels converting incoming  $1.55\mu\text{m}$  ultrashort pulses (see column 10, lines 39-42) into  $0.98\mu\text{m}$ ,  $0.53\mu\text{m}$ , and  $0.78\mu\text{m}$  signals, each on its own channel. No channel carries a signal with the original  $1.55\mu\text{m}$  wavelength, and each channel changes the original wavelength, i.e., changes the signal's original frequency. Therefore, Galvanauskas, does not disclose a frequency-preserving path.

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### **Claim 1.**

A claim is anticipated only if each and every element as set forth in the claim is found, either expressly or inherently described, in a single publication, MPEP 2131. As had been shown above, at least one limitation of independent amended Claim 1 is not described, expressly or inherently, in Galvanauskas, namely, a frequency-preserving path. Therefore, Applicant respectfully asserts that independent amended Claim 1 is not anticipated by Galvanauskas. Withdrawal of the 102(b) rejection over Galvanauskas and allowance of independent amended Claim 1 is respectfully requested.

### **Claim 8.**

To establish prima facie obviousness of a claimed invention, all the claim limitations must be taught or suggested by a publication or a combination of publications, MPEP 2143.03. As had been shown above, at least one limitation of independent amended Claim 8 is not described, expressly or inherently, in Galvanauskas, namely, a frequency-preserving path. Therefore, Applicant respectfully asserts that independent amended Claim 8 is not unpatentable over Galvanauskas. Withdrawal of the 103(a) rejection over Galvanauskas and allowance of independent amended Claim 8 is respectfully requested.

### **Claim 2.**

A claim in dependent form incorporates all the limitations of the claim to which it refers, 35 U.S.C. 112. Dependent Claim 2 refers to amended independent Claim 1, now allowable, as had been shown above. Therefore, Applicant respectfully asserts that Claim 2 is not unpatentable over Galvanauskas in view of Bentsen. Withdrawal of the 103(a) rejection over Galvanauskas in view of Bentsen and allowance of Claim 2 is respectfully requested.

### **Claim 7.**

A claim in dependent form incorporates all the limitations of the claim to which it refers, 35 U.S.C. 112. Amended dependent Claim 7 refers to amended independent

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Claim 1, now allowable, as had been shown above. Therefore, Applicant respectfully asserts that amended Claim 7 is not anticipated by Galvanauskas. Withdrawal of the 102(b) rejection over Galvanauskas and allowance of amended Claim 7 is respectfully requested.

**Claims 9 and 10.**

If an independent claim is nonobvious under 35 U.S.C. 103, then any claim depending therefrom is nonobvious, MPEP 2143.03. Claim 10 and amended Claim 9 depend from amended independent Claim 8, which is nonobvious, as had been shown above. Therefore, Applicant respectfully asserts that Claim 10 and amended Claim 9 are not unpatentable over Galvanauskas in view of Bentsen or over Galvanauskas, respectively. Withdrawal of the 103(a) rejection and allowance of Claim 10 and amended Claim 9 is respectfully requested.

**Claims 3-6 and 11-13.**

Claims 3-6 and 11-13 have been withdrawn from consideration in response to a USPTO restriction requirement. Amended Claims 1 and 8 link the withdrawn Claims to the elected Claims. Amended linking Claims 1 and 8 are now allowable, as had been shown above. Since the restriction requirement as set forth in Office Action mailed on July 8, 2003, was conditioned on the nonallowance of the linking claims, Applicant respectfully requests that the restriction requirement be withdrawn.

Claims 3-6 and 11-13 depend off now allowable amended Claims 1 and 8 and are therefore allowable. Allowance of Claims 3-6 and 11-13 is respectfully requested.


Applicant reserves the right to present Claims 3-6 and 11-13 in a divisional, continuation, or continuation-in-part application.

Applicant believes that the present application is in condition for allowance. Issuance of Notice of Allowance is respectfully requested. Should any questions arise, the Examiner is encouraged to contact the undersigned.

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Respectfully submitted,

HOUSTON ELISEEVA, LLP

By   
Ilya R. Lapshin  
Registration No. 54,251  
Customer No. 29127  
Houston Eliseeva LLP  
4 Militia Drive, Ste. 4  
Lexington, MA 02421  
Tel.: 781 863 9991  
Fax: 781 863 9931

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